

## ADDITIONAL HEALTH INFORMATION

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

(A) **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

(E) **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

## FOR CUSTOMERS WITH SPECIAL HEALTH CONCERNS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## HOW TO REACH US

If you have any questions about this report or concerning your water utility, please contact St. Lucie County Utilities at 772-462-1150. The office is open from 8:00 am until 5:00 pm, Monday through Friday. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Board of County Commissioner meetings. They are normally held on the 1<sup>st</sup> and 3<sup>rd</sup> Tuesday at 6 pm and the 2<sup>nd</sup> and 4<sup>th</sup> Tuesday at 9 am at the County Commission Chambers.

## SOURCE WATER ASSESSMENT PLAN

The Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on the FPUA system in 2009. The assessment was conducted to provide information about any potential sources of contamination near the FPUA wells. There are 27 potential sources of contamination identified for this system with a low to moderate susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp).

## HOW TO READ THE TABLE

The terms used in the water quality summary table and in other parts of this report are defined below.

**Action level (AL)** – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Initial Distribution System Evaluation (IDSE)** – an important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

**Maximum contaminant level or MCL** – the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum contaminant level goal or MCLG** – the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum residual disinfectant level or MRDL** – the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum residual disinfectant level goal or MRDLG** – the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**N/A** – not applicable

**ppm** – parts per million or milligrams per liter is one part by weight of analyte to one million parts by weight of the water sample.

**ppb** – parts per billion or micrograms per liter is one part by weight of analyte to one billion parts by weight of the water sample.

**pCi/l** – picocuries per liter is a measure of the radioactivity in water

## ST. LUCIE COUNTY UTILITIES NORTH WATER SYSTEM PWS ID# 4565197

## 2009 ANNUAL DRINKING WATER QUALITY REPORT

*Este informe continene información muy importante sobre su agua beber. Tradúscalo ó hable con un amigo quien lo entienda bien.*

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. If you have any questions or concerns about the information provided in this report, please feel free to call any of the numbers listed.

## WHERE YOUR WATER COMES FROM

St. Lucie County Utilities purchases water from Ft. Pierce Utilities Authority (FPUA). The source is ground water which is withdrawn from wells in the Floridan and Surficial Aquifers. The water is treated by conventional lime softening, aeration, and sand filtration and also reverse osmosis. The water is then disinfected to destroy microbes and fluoride is added to prevent tooth decay prior to delivery to customers.

## HOW WE ENSURE YOUR DRINKING WATER IS SAFE

St. Lucie County Utilities and FPUA routinely monitor for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2009. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data are more than one year old but are based on the most recent water analyses performed and are representative of the water quality.

2009 WATER QUALITY SUMMARY TABLE – PWS ID NO. 4565197							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected <sup>A</sup>	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
<b>Inorganic Contaminants</b>							
Barium (ppm)	3/08	N	0.007	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	1/09 – 12/09	N	0.7	0.4 – 1.0	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm.
Nitrate (as Nitrogen) (ppm)	1/09	N	0.04	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	1/09	N	0.034	N/A	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	3/08	N	41	N/A	N/A	160	Salt water intrusion, leaching from soil
Thallium (ppb)	3/08	N	1.1	N/A	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
<b>Stage I Disinfectants and Disinfection By-Products</b>							
Chloramines (ppm)	1/09 – 12/09	N	1.0	0.7 – 2.5	4	4.0	Water additive used to control microbes
HAA5s (Haloacetic acids) (five) (ppb)	2/09, 8/09, 9/09, 11/09 & 12/09	N	15.2	11.0 – 44.6	N/A	60	By-product of drinking water disinfection
TTHMs (Total trihalomethanes) (ppb)	2/09, 8/09, 9/09, 11/09 & 12/09	N	16.4	10.2 – 23.0	N/A	80	By-product of drinking water disinfection
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
<b>Lead and Copper (Tap Water)</b>							
Copper (tap water) (ppm)	9/09	N	0.0423	0	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	9/09	N	3.23	0	0	AL = 15	Corrosion of household plumbing systems, erosion of natural deposits

TABLE NOTES:

- A. Results in the level detected column for inorganic contaminants are the highest detected level at any sampling point except for fluoride which is a running annual average (raa). The result in the level detected column for chloramines is the highest raa, computed quarterly, of the monthly averages of all samples collected. For TTHMs and HAA5s, the level detected is the average of all samples taken during the year since the system monitors less frequently than quarterly. The result in the level detected column for copper and lead is the 90<sup>th</sup> percentile of all sample results. The range of results is the range of results (lowest to highest) at the individual sampling sites, including Initial Distribution System Evaluation (IDSE) results as well as Stage 1 compliance results.
- B. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The St. Lucie County North water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.